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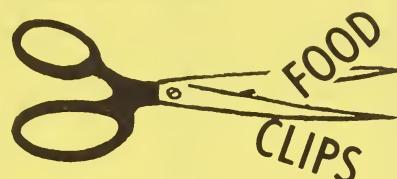
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# Food and Home Notes

UNITED STATES DEPARTMENT OF AGRICULTURE  
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What's the difference between a dough and a batter? Dough should be thick enough to be rolled or kneaded — batter should be thin enough to pour or drop from a spoon....according to the U.S. Department of Agriculture.

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Eggs — a natural emulsifier help to keep fat particles suspended in batters and to maintain smoothness.

\* \* \*

Did you know that quality in baked products sometimes depends on the baking pan you use? Proper depth in the pan and dark or dull pans make a difference. Follow the directions in your recipe — it's important.

\* \* \*

Fat is the most concentrated source of food energy. It supplies 9 calories per gram; protein and carbohydrate, the other two sources of food energy, supply 4 calories per gram. (Alcohol supplies 7 calories per gram)

\* \* \*

It is not unusual for fat to supply 45 to 50 percent of the total calories in an American's diet.

## THORNLESS BLACKBERRIES —For the Home Garden

First we had none. Now we have two thornless blackberry varieties for the home gardeners — Smoothstem and Thornfree blackberry plants which were developed by the U.S. Department of Agriculture. They are productive blackberries, thorn free, easy to handle and require little summer pruning. The fruits are firm and highly flavored.

Blackberries are planted in early spring in the north; in late winter or early spring in the south. They vary on their ability to withstand cold, but none should be grown where temperatures drop to 0°F and below. They may be grown in almost any soil, except very sandy soil — if the drainage is good. They need plenty of space between rows and the soil should be prepared as you would for a vegetable or flower garden. They do need thorough and frequent cultivation; weeds and grasses compete for moisture and are difficult to control.

And, remember, you only pick berries in the morning while the temperature is still cool — so they don't spoil too quickly — Pick when fully ripe but firm.

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USDA 1218-75

## COST OF 20 GRAMS OF PROTEIN FROM SPECIFIED MEATS AND MEAT ALTERNATES AT JANUARY 1975 PRICES

Food	Market unit	Price per market unit 1/	Part of market unit to give 20 grams of protein 2/	Cost of 20 grams of protein
Dry beans.....	lb	\$0.49	.24	\$0.12
Peanut butter.....	12 oz	.68	.23	.16
Bread, white enriched.....	lb	.37	.51	3/.19
Hamburger.....	lb	.86	.24	.21
Eggs, large.....	doz	.84	.25	.21
Beef liver.....	lb	.90	.24	.22
Chicken, whole, ready-to-cook	lb	.59	.37	.22
Milk, whole fluid.....	half gal	.79	.29	4/.23
Turkey, ready-to-cook.....	lb	.71	.35	.25
Pork, picnic.....	lb	.80	.32	.26
Chicken breasts.....	lb	1.02	.25	.26
Bean soup, canned.....	11.5 oz	.28	.96	.26
Tuna, canned.....	6.5 oz	.61	.44	.27
American process cheese.....	8 oz	.73	.38	.28
Chuck roast of beef, bone in..	lb	.93	.35	.33
Ham, whole.....	lb	1.17	.29	.34
Round beefsteak.....	lb	1.73	.22	.38
Ocean perch, fillet, frozen...	lb	1.07	.36	.39
Pork loin roast.....	lb	1.20	.33	.40
Frankfurters.....	lb	1.12	.36	.40
Ham, canned.....	lb	1.73	.24	.42
Liverwurst.....	8 oz	.71	.60	.42
Sardines, canned.....	4 oz	.46	.94	.43
Rump roast of beef, boned.....	lb	1.69	.26	.43
Salami.....	8 oz	.86	.50	.44
Sirloin beefsteak.....	lb	1.74	.28	.49
Rib roast.....	lb	1.59	.33	.52
Haddock, fillet, frozen.....	lb	1.51	.35	.53
Bologna.....	8 oz	.75	.73	.55
Pork chops, center cut.....	lb	1.60	.35	.56
Pork sausage.....	lb	1.19	.52	.61
Lamb chops, loin.....	lb	2.21	.31	.68
Porterhouse beefsteak.....	lb	2.05	.34	.69
Veal cutlets.....	lb	3.33	.21	.71
Bacon, sliced.....	lb	1.49	.52	.78

1/ Average retail prices in U.S. cities, Bureau of Labor Statistics, U.S. Department of Labor.

2/ One-third of the daily amount recommended for a 20-year-old man. Assumes that all meat, including cooked fat, is eaten.

3/ Bread and other grain products, such as pasta and rice, are frequently used with a small amount of meat, poultry, fish or cheese as main dishes in economy meals. In this way the high quality protein in meat and cheese enhances the lower quality of protein in cereal products.

4/ Although milk is not used to replace meat in meals, it is an economical source of good quality protein. Protein from nonfat dry milk costs about half as much as from whole fluid milk. Source: Agriculture Research Service

TRACE ELEMENT—SELENIUM  
in Research

Selenium — an essential trace element in the human diet — is present in some of the so-called "new foods" — made from textured vegetable protein or soybean flour — used in meat extenders, meat substitutes, sauces and other foods. These foods now represent a \$75 million market and the market today is sevenfold greater than sales were only five years ago. By 1980, sales of these foods are expected to rise to more than \$2 billion according to reports by the U.S. Department of Agriculture.

In some of the soy foods, selenium is present in adequate amounts -- but not in all of the foods, according to Dr. Renato J. Ferretti, an Agricultural Research Service chemist.

"The quantity of selenium could be considered adequate in some synthetic red meats made with soy products," Dr. Ferretti said. "A chicken-style soy meat also had a nutritionally adequate quantity of selenium — about equal to that of chicken breasts."

In research conducted by Dr. Ferretti and Dr. Orville A. Levander, two textured vegetable protein products, containing soy flour as an ingredient, had only about one-fourth as much selenium as did ground beef. In contrast, one synthetic hamburger product, containing no soy flour, had about three times more selenium than did the ground beef. This high quantity is probably attributed to the wheat protein and mushrooms in this product.

Pancake and waffle mixes containing soy flour also had an adequate quantity of selenium according to USDA research. Products containing inadequate amounts of selenium included a soy cheese sample, soybeans in tomato sauce, and soybeans in molasses. Roasted soybeans, a snack food, also contained an insufficient amount of selenium but had twice as much as roasted peanuts. The variability in the selenium content of these foods is the result of differences in the selenium content of the soil where the soybeans were grown.

## Trace element (con't)

How much selenium is needed in human diets? The minimum quantity of selenium has not been established, according to the report. However, amounts that prevent disease in domestic animals have been determined, and are used in estimating the adequacy of this essential element in human diets.

What results from the improper amounts of selenium in food? Selenium can prevent liver degeneration, according to studies with rats. Some serious diseases of lambs, calves and chickens can be prevented by adding selenium to the diet or by injecting it in the animals and birds, according to other studies.

And what about excess amount? Too much can result in sore feet, loss of hair, and sometimes death in animals. Reduced growth or infertility of animals and chickens may also result because of excess amounts of selenium in diets.



Less pipe-less water wasted. Have your water heater installed as near to the point of hot water use as possible. Even with a pipe run of about 20 feet 2 quarts of water must be drawn off before 120 F. water runs through the faucet. In the average kitchen, this can amount to 4,160 quarts wasted each year. Not only is the water wasted, but so is the energy it took to begin heating it. Remember, the power you spare—will clean the air, according to Woodsy Owl, Forest Service, U.S. Department of Agriculture.

NOTE: Additional information for the MEDIA and photographs (when applicable) may be obtained from: Shirley Wagener, Editor of Food and Home Notes, Room 535A Office of Communications/Press Service, U.S. Department of Agriculture, Washington, D.C. 20250 Or telephone 202-447-5898